PlayStation®2

SCPH-30000 series
SCPH-35000 series
SCPH-30000R series
SCPH-39000 series
SCPH-50000/50000SS series

SERVICE MANUAL
Level-1

PlayStation®2 Level-1 Service & Procedures Manual / Version 4.0 Sept 2003

NOTE: READ THIS DOCUMNENT IN CONJUCTION WITH THE LATEST SERVICE GUIDELINES ISSUED BY SEC

SPECIFICATIONS

General
Power requirements
220-240 V AC, 50/60 Hz
for SCPH-30002D/-30003D/-300004D
-35002/-350003/-350004

Power consumption
50W
for SCPH-30002D/-30003D/-300004D
-35002/-350003/-350004

Dimensions
301 x 78 x 182 mm (w/h/d)
Mass
2.4 kg

Inputs/Outputs on the front
Controller ports (2)
Memory Card slots (2)
USB ports (2)
S400 (I-Link) port (1)

Inputs/Outputs on the rear
HDD by slot (1)

Outputs on the rear
AV Multi out port (1)
RGB, Ycbcr, Y/C, Composite-video,
Audio-L/R, XGA
Digital out port (1)
Optical audio

Supplied accessories
AC power cord (1)
Euro-AV connector (1)
for SCPH-30003/4 & 35003/4
SCPH-30003/4 R & SCPH-39003/4
SCPH-50003/4 & SCPH-50003/4SS
A/V connecting cable (1)
Dualshock2 Analog controller (1)

DISC (GT3)
for SCPH-35002/-350003/-350004

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SCPH-30000 series and SCPH-35000 series GH013 (31/41) MOUNT on board

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SAFETY-RELATED COMPONENT WARNING

Components identified by mark ⚠ and in the parts list are critical to safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS
AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

IMPORTANT_
SONY COMPUTER ENTERTAINMENT DEMANDS THAT AT NO TIME SHOULD A MOTHERBOARD BE EXCHANGED FROM ONE CONSOLE TO ANOTHER. NO MCB PARTS ARE INCLUDED ON LEVEL-1 REPAIR.

IMPORTANT_
Do NOT touch any PlayStation®2 parts not listed on this manual.

CAUTION_
Replace the battery with a Sony CR2032 battery. Use of any other type of battery may present the risk of fire or explosion. The battery may explode if mistreated. Do not recharge, disassemble, or dispose of in fire.

CAUTION_
The use of optical instruments with this product will increase eye Hazard. As the laser beam used in this CD/DVD player is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 25cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

CAUTION_
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION for electric shock
When power is ON, Don't touch to Power supply block, AC-inlet, Power switch and so on, not to get an electric shock at repair.

CAUTION for burning
When current is supplied, Some of part surface temperature like EE, GS, Regulater-IC, power supply, Optical device and so on. These part surface is become high temperature condition. When it repair, don't touch them at a time during it surface is high temperature condition to take prevent against burning. Do repair after it is cooled down enough.

CAUTION_
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

SAFETY CHECK-OUT
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
1. Check the area of your repair for unsoldered or cold-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the inter board wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts, which, though functioning, show obvious signs of deterioration. Point them out of the customer and recommend their replacement.
5. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
6. Check the b+ voltage to see it is at the values specified.
7. Check the antenna terminals, metal trim, "metalized" knobs, screws, and all other exposed metal parts for ac leakage.

NOTIFICATION for environmental assessment
This model is CR2032 lithium battery onboard inside on the GD MOUNT as Timer backup power. CR2032 life may be about 5 to 8 years so you have very few need for changing to new one. But if you have necessary to replaced to new one or disassemble for scrapping, you have to keep your country low, regulation, standard, etc. of environmental assessment and safety.

NOTE: Some of the above safety text is NOT applicable to Level-1 Repairs

GENERAL INFORMATION

NOTICE: Copyright by Sony Computer Entertainment Inc. All rights reserved. No reproduced and transferred required except permission by Sony Computer Entertainment Inc. No commercial use and rental required.

REVISIONS: This manual compiled by first edition of SCPH-30000 series and SCPH-35000 series design data. Design and Specification will be subject to changed without notice. The latest versions of service manual, Technical memo, and Technical information should be used together.

1. SERVICE NOTE/CONDITIONS

Level-1 service is only allowed by Sony Service Centres (SSC) or dedicated Authorised Service Centre (ASC) [note1]. Other type of repair still has to be carried out by SEC-ROE as appropriate jigs or tools are not available to SSC/ASC [note1].

1.1. Conditions

- SSC and ASC [note1] can **only** perform PlayStation®2 Level-1 repair as described in this manual;
- It is strictly prohibited to perform any Level-2 and/or Level-3 repairs on PlayStation®2 units;
- Level-2 repairs must only be performed by SEC–ROE (or SSC/ASC authorised by SCEE)
- Level-3 repairs must only be performed by SEC-ROE;
- Any PlayStation®2 unit submitted to any kind of abuse repair will never be classified as ‘in warranty’;
- Units sent to SEC-ROE for Level-2 and/or Level-3 repair that shows any evidence of abuse[2] will not be compensated;
- SSCs and ASCs [note1] must have an appropriate Warranty Seal Control procedure covering the following areas: inventory control, process, audit trail and replenishment of stock (please refer to paragraph six in this manual for more details).

1.2. Fault Information & FAQ

Sony Computer Entertainment Europe (SCEE) will provide Fault Information and Frequent Asked Questions through the Technical Service Extranet site (http://tech.scee.net/tech.nsf). This is a secured site and can only be accessed by personnel authorised by SCEE (please contact SCEE if you require access to this system).

1.3. Inner Carton re-order

In the case of defective units arriving at SSC or ASC [note1] without the original inner carton: SCEE will make ‘brown’ inner cartons available to order by SOSA Central Warehouse. For more information contact SOSA Central Office. Brown inner cartons can be used for returning consoles repaired locally and as a transportation box to SEC-ROE.

[2] *Abuse: any units missing original components, having additional components (e.g. modifying chips) and/or physical liquid damage.*

2. WARRANTY

Service Warranty

The warranty on Level-1 repaired PlayStation®2 should be set to 90 days. Repaired units are eligible to free of charge re-repair within the 90 days warranty.

I/W Reimbursement system

In case service is carried out in-warranty, please proceed for compensation according to the standard Warranty Reimbursement rules, outlined in the SEC-ROE Warranty Rulebook.

3. APPLICABLE MODELS

This Level-1 Service Manual is applicable to the following PlayStation®2 models:

- SCPH-30002 /SCPH-30003 /SCPH-30004 (C)
- SCPH-30002 /SCPH-30003 /SCPH-30004 (D)
- SCPH-35002 /SCPH-35003 /SCPH-35004 (D)
- SCPH-30002R/SCPH-30003R/SCPH-30004R (F)
- SCPH-39002 /SCPH-39003 /SCPH-39004/SCPH39008 (G)
- SCPH-50002/3/4/8 & SCPH-50002/3/4 SS (H)

4. LEVEL-1 SERVICE SPECIFICATION

Definition

Level-1 service is only allowed by SSC or dedicated ASC [note1] and specified as follows:

- Cosmetic and easy repairs using level-1 spare parts mentioned in this manual;
- Replacement of dedicated parts, such as power supply module, terminal board, etc. (please refer to this manual for a full list of dedicated parts);
- Adjustment of mechanical parts (NOT on optical block);
- Removal of stuck disk;
- No Problem Found (NPF).

5. SPARE PARTS REORDERS

SSC and ASC [note1] are only authorised to order spare parts listed in this manual. Spare parts should be ordered through existing WRPCE system/procedures. For more information on parts reorders, please refer to SEC-ROE guidelines/procedures.

Note 1 *Where no SSC is present in the country*

Repairs must be controlled by the use of **Warranty Seals** (Part Number: 3-066-498-01, Tape/Void). Warranty Seals must be strictly controlled. All countries wishing to perform Level-1 repair on PlayStation®2, as described in this manual, must submit appropriate Warranty Seal Control procedures covering the following areas: inventory control, process, audit trail and replenishment of stock.

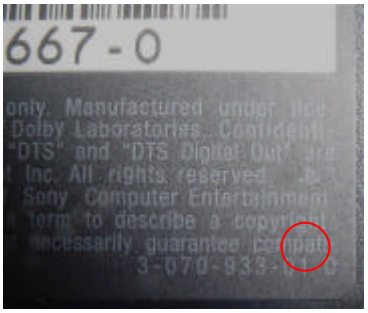
To ensure that Warranty Seals are controlled properly, each SSC and ASC [note1] must have a nominated member of staff who is responsible for these parts. They should carry out the following functions:

- Confirm that the service centre inventory accurately represents the true stock level when reported to SCEE;
- To report promptly any loss due to damage, theft, defective application or unforeseen incident;
- This person will also be responsible for the periodic reporting to SCEE, and should maintain the local audit files to be examined by SCEE as part of a stock inventory audit.
- SSC and ACS [note1] must re-seal all PlayStation®2 units that could not be repaired locally (Level-1 repair) before shipping the unit to SEC-ROE for Level-2/Level-3 repair. **Reimbursement will not be granted for PlayStation®2 units arriving at SEC-ROE without warranty seal (even if in-warranty).**

7. REPORTING

SCEE must obtain Level-1 repair information from all countries performing Level-1 repairs locally. Monthly reports will be extracted from ESQI-line, however it is imperative that PlayStation®2 is reported on a “model type” basis (e.g. C-model, D-model, etc). Information must be entered in the ESQI-line in the following format:
Example:

- Console SCPH-30004 type D = SCPH-30004D
- Console SCPH-30004R type D = SCPH-30004RD
  How to identify model type: All Engineers should be able to identify consoles by Model type (e.g. "C","D","F","G"), if not, model type can be identified on the number plate on the “right bottom left hand corner” next to a number with the following format: "3-070-933-01 D" (this last digit refers to the model type)

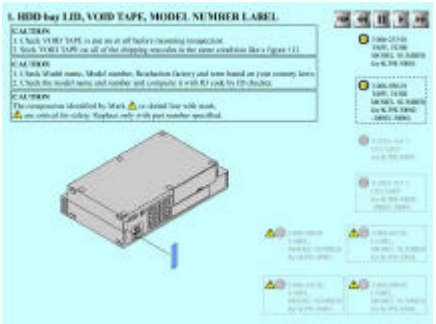


8. REMOVAL OF STUCK DISC

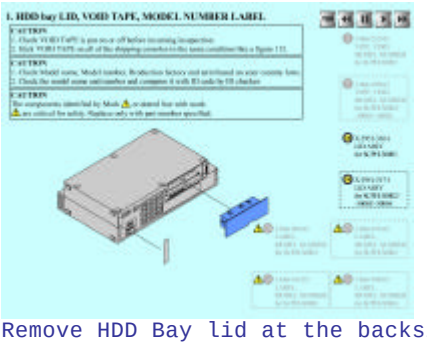
IMPORTANT NOTE: PlayStation®2 unit must always be handled in ESD-safe conditions:
- Workbench with anti-ESD mat, connected to earth
- Technician should wear wrist/ankle strap, connected to any-ESD-mat

In the case, both, power and loading mechanism are active:
Connect the PlayStation®2 unit to the power and switch the unit on at the back. When the red LED at the front side is blinking, push this button and the unit will switch one. Disc can be removed by pushing the eject button.

In case power or loading mechanism is not active:

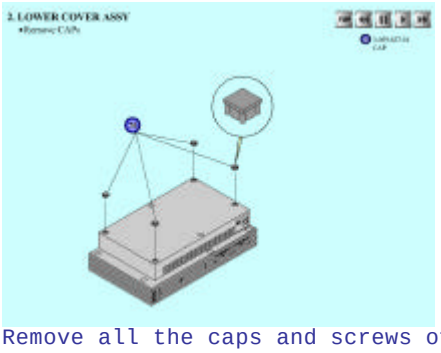


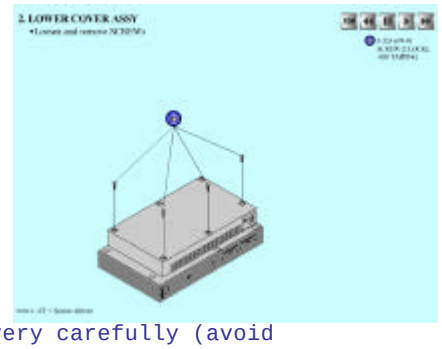
1. Remove tape void at backside of the unit.



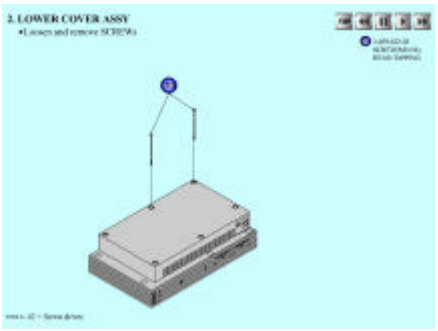
2. Remove HDD Bay lid at the backside of the unit.

Note 1 *Where no SSC is present in the country*

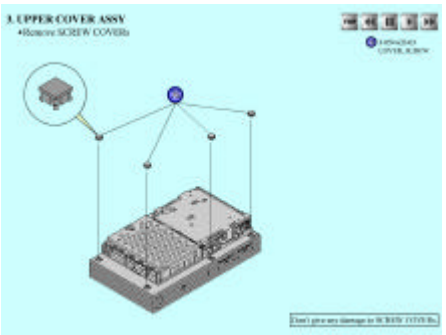




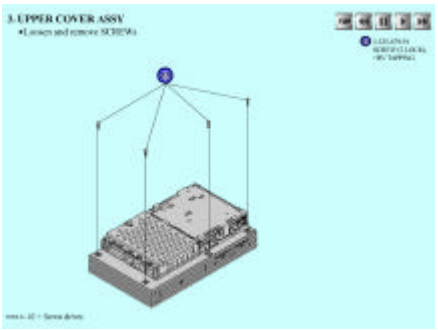
3. Remove all the caps and screws of the bottom cabinet very carefully (avoid physical/cosmetic damage on cabinets)



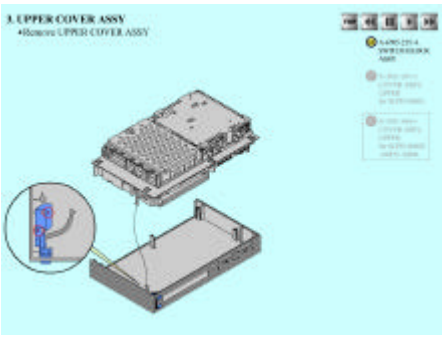
4. Remove the two long screws on the upper cabinet carefully



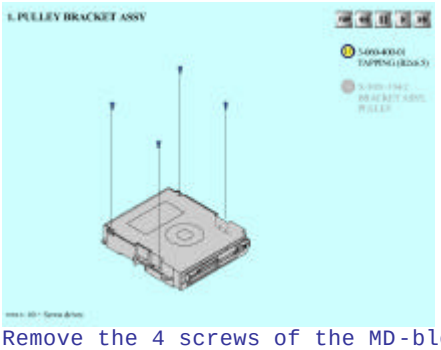
5. Remove the caps of the upper cabinet carefully



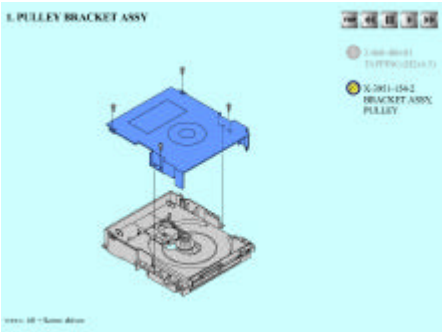
6. Remove the screws of the upper cabinet



7. Disconnect the power switch from the upper cabinet



8. Remove the 4 screws of the MD-block



9. Lift the pulley bracket assy and remove the software

9. REPAIR PARTS LIST/EXPLODED VIEWS

Main parts/assembles, which are used by Level-1 centres: All cosmetics, fan, power supply, ribbon cables, controller port connector and various mechanical components.

The mechanical parts with reference on the exploded view (below) with a respective part number on the spare parts list are supplied to level-1 repair centres.

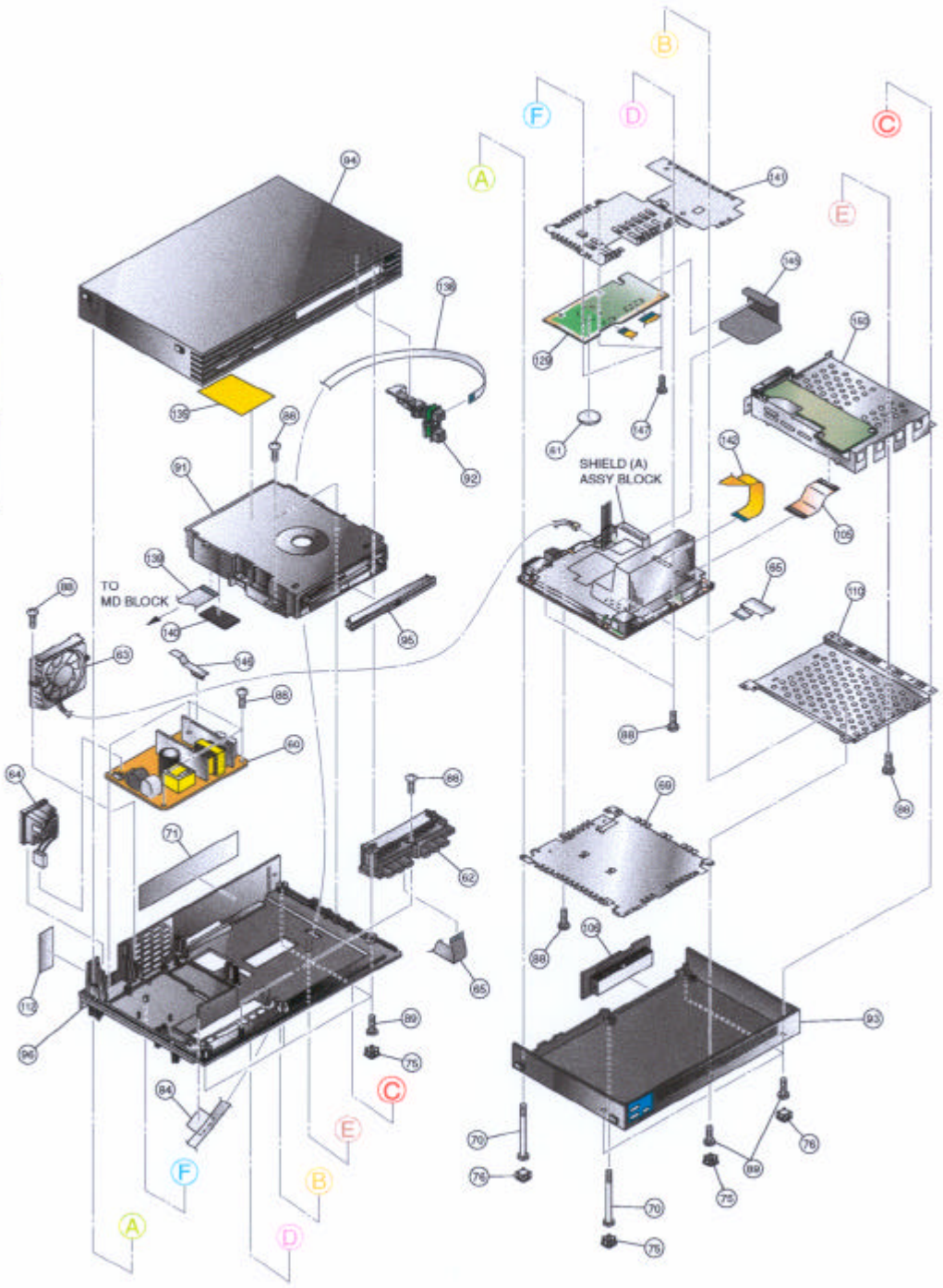
The mechanical parts with reference on the exploded view (below) but **without** a respective part number on the spare parts list **are not supplied** to level-1 repair centres.

Overall and Main Block

CAUTION

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

CAUTION :
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



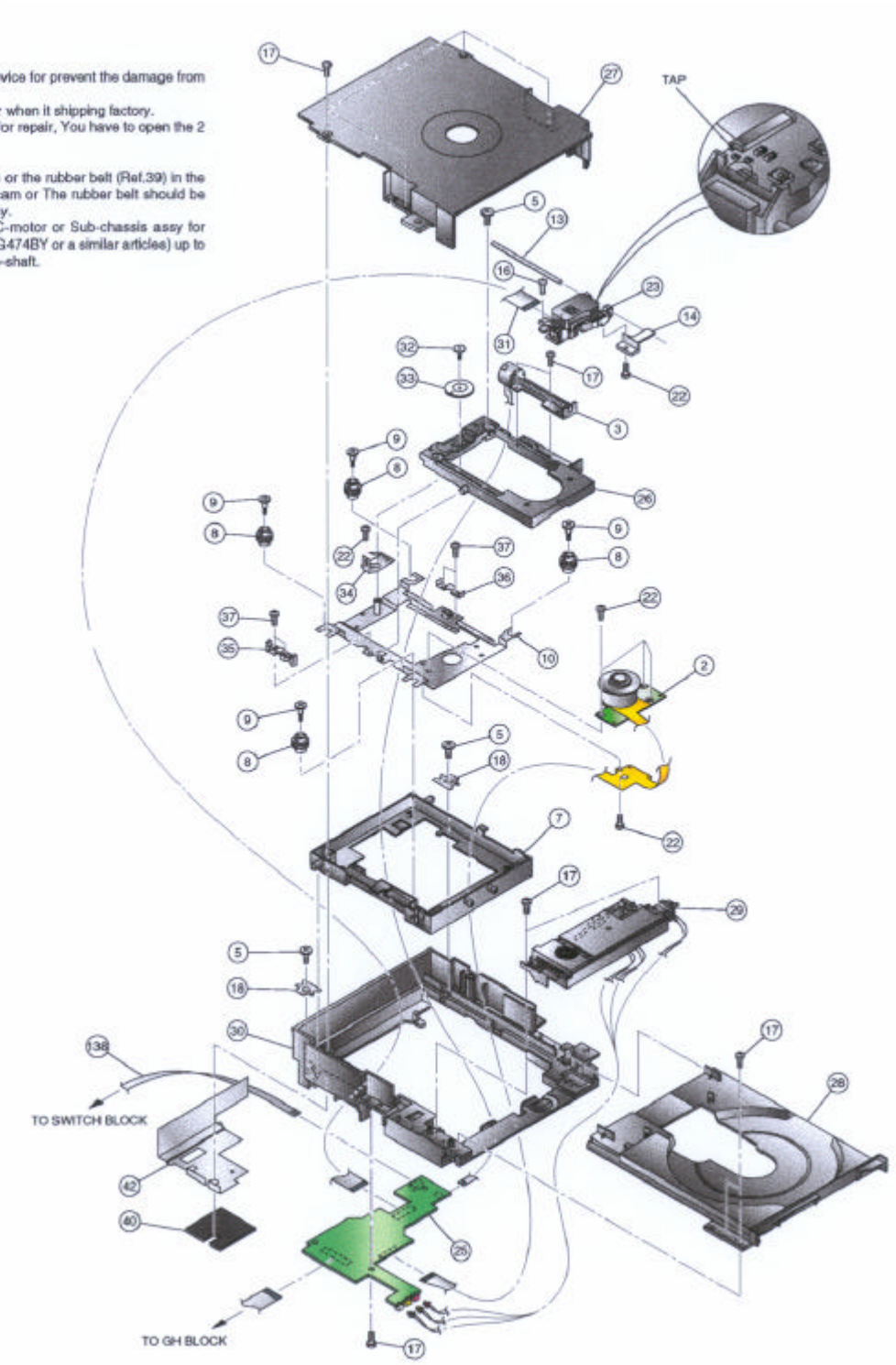
Ref-No.	Part No.	Description	Remark	Place code
60	1-468-565-21	POWER BLOCK		#00
61	1-528-174-41	PS2 BATTERY, LITHIUM (CR2032 TYPE)	OTHER NON-PS2 "LITHIUM CR2032 TYPE BATTERY" MAY BE USED.	#25GD
62	1-694-767-11	TERMINAL BOARD (FRONT)		#17
63	1-763-480-11	DC. FAN		#74
64	1-771-995-12	SWITCH, POWER (WITH AC INLET)		#00
65	1-792-491-21	CABLE, FLEXIBLE FLAT (FFC-290)		#12
69	3-066-489-01	SHIELD (B)		#16
70	3-059-622-02	SCREW (M3X54), HEAD TAPPING		#87
75	3-059-626-03	COVER, SCREW		#22
76	3-059-627-01	CAP		#22
88	3-325-679-21	SCREW, TAPPING +BV 3X12		#87
93	X-3951-398-1	COVER ASSY, LOWER		#87
94	X-3951-498-1	COVER ASSY, UPPER		#87
95	X-3951-099-1	PLATE ASSY, ORNAMENTAL		#87
105	1-680-147-11	PWB, FP-324 FLEXIBLE		#12
106	X-3951-317-1	LID ASSY		#87
112	3-066-498-01	TAPE, VOID		#87
138	1-757-588-11	CABLE, FLAT (FFC-308)		#12
139	1-757-590-11	CABLE, FLAT (FFC-310)		#12
142	1-757-589-11	CABLE, FLAT (FFC-309)		#25GD

MD Block

CAUTION

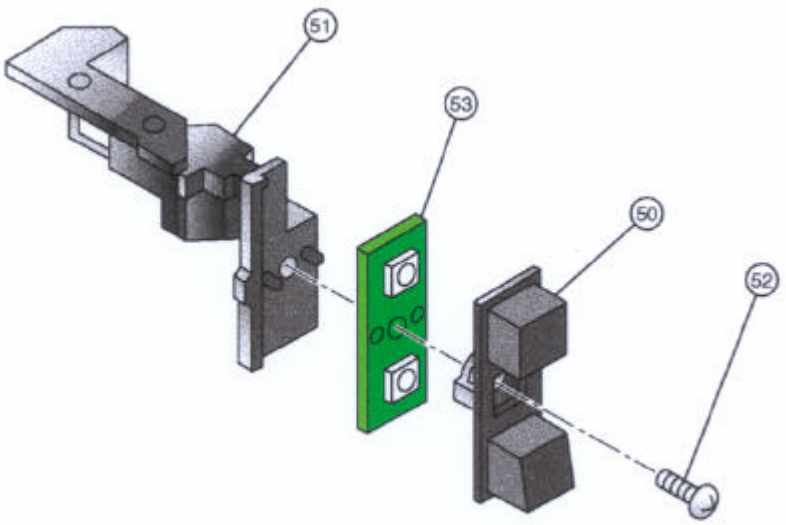
There are 2 taps behind Optical device for prevent the damage from static electricity.
these are usually shorted by solder when it shipping factory.
When You use the Optical device for repair, You have to open the 2 taps by melting solder.

In s case of the slide-cam (Ref.38) or the rubber belt (Ref.39) in the gear box assy broken, The slide-cam or The rubber belt should be exchanged itself, not Gear box assy.
When you exchange the feed DC-motor or Sub-chassis assy for repair, You have to grease Floil (SG474BY or a similar articles) up to Feed motor sledding gear and Sub-shaft.



Ref-No.	Part No.	Description	Remark	Place code
17	3-060-400-01	TAPPING (B2X6.5)		#10
27	X-3951-154-2	BRACKET ASSY, PULLEY		#10
28	X-3951-153-2	TRAY ASSY		#10TR
29	X-3951-156-3	BOX ASSY, GEAR		#10GB
31	1-680-370-11	PWB, FLEXIBLE		#10

Switch Block



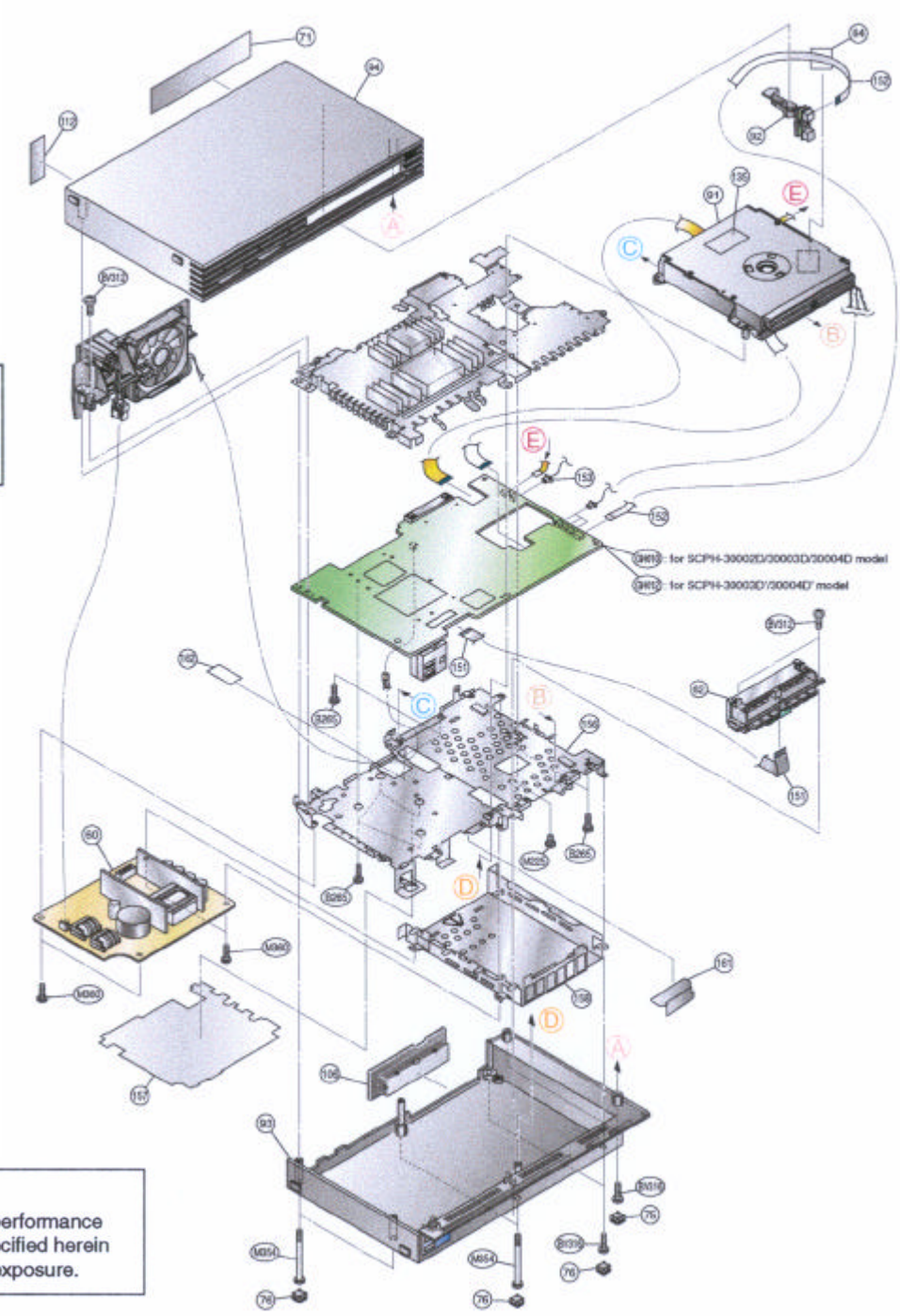
Ref-No.	Part No.	Description	Remark	Place code
50	3-059-665-03	BUTTON, SWITCH		#25SW
51	3-059-666-05	BRACKET, SWITCH		#25SW
52	7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT		#25SW
53	A-6712-830-A	SW-355 MOUNT		#25SW

Overall and Main Block for SCPH-30002D/30003D/30004D/35002/35003/35004

CAUTION

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

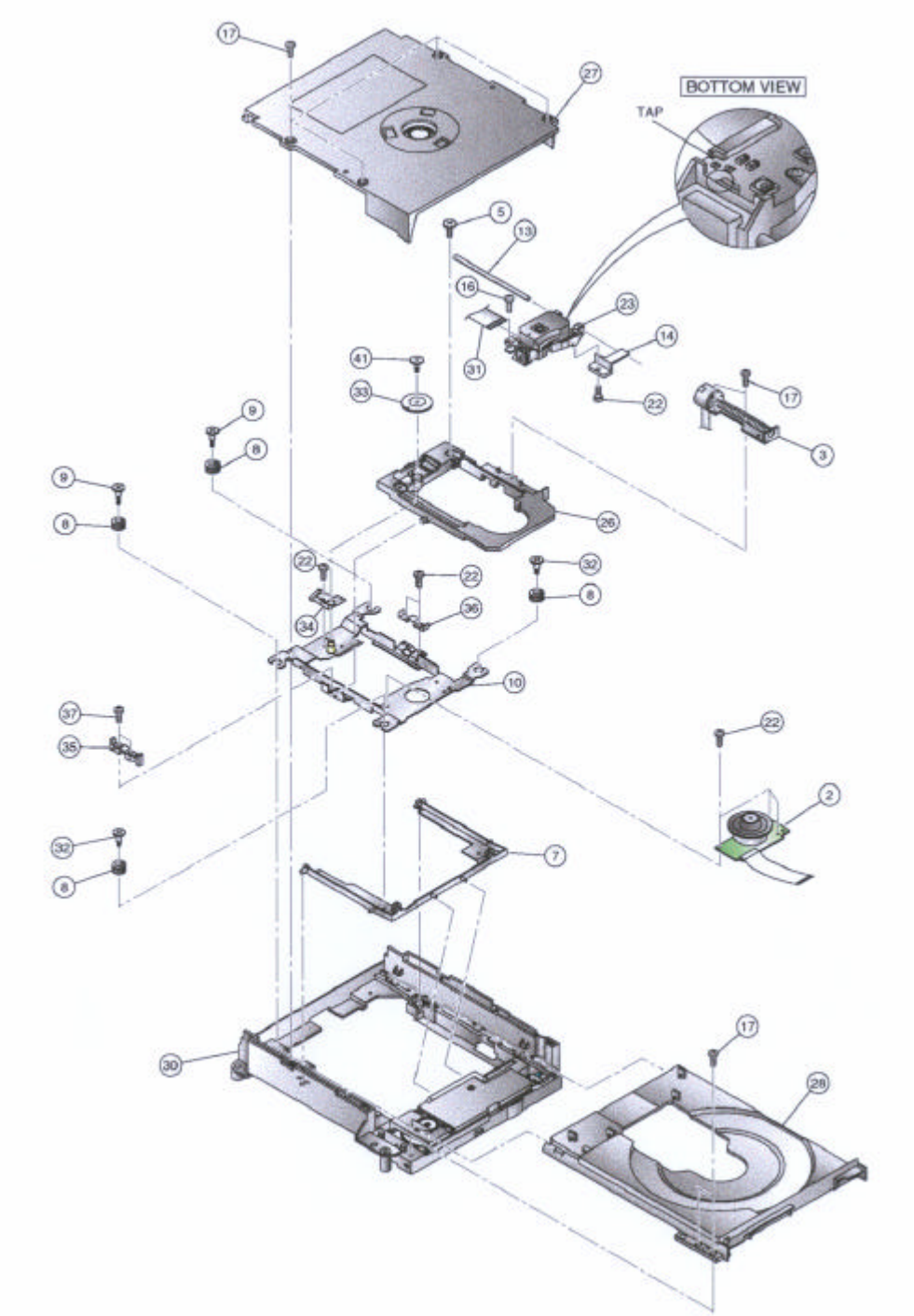
CAUTION
Don't lose the insulating sheet when assemble the console.



CAUTION :
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

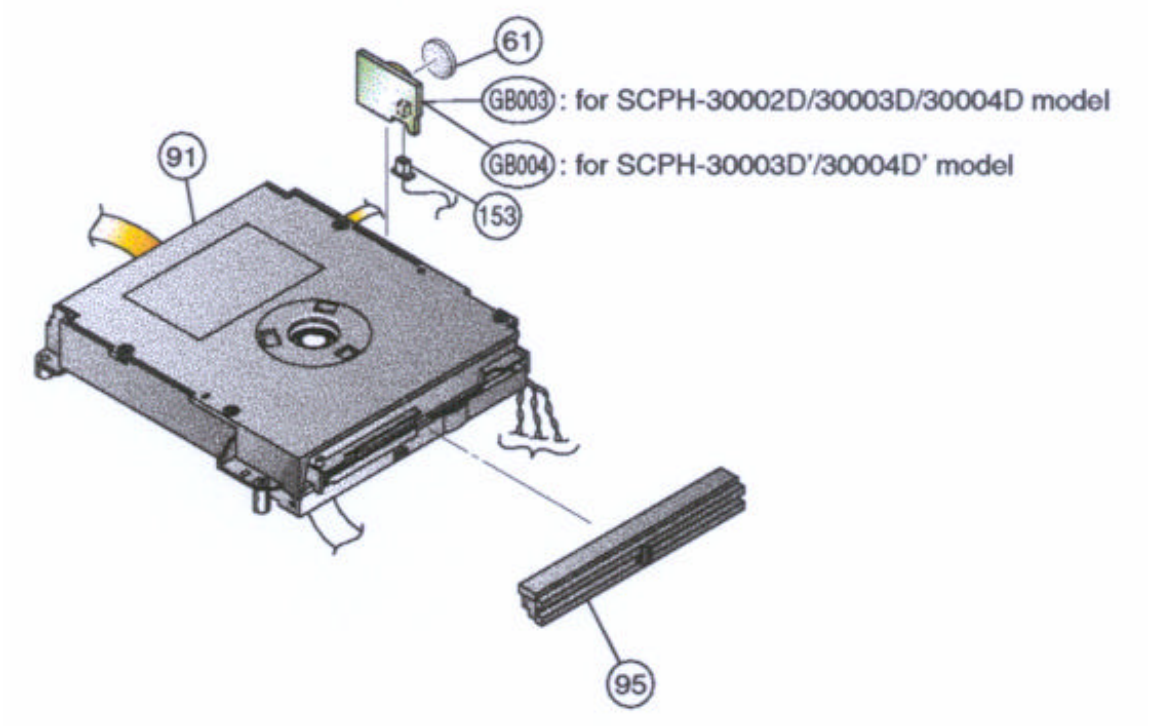
Ref-No.	Part No.	Description	Remark	Place code
60	1-468-605-11	POWER BLOCK		#00
62	1-694-676-21	TERMINAL BOARD (FRONT)		#17
62	1-694-729-21	TERMINAL BOARD (FRONT)		#17
62	1-694-769-31	TERMINAL BOARD (FRONT)		#17
75	3-059-626-03	COVER, SCREW		#22
76	3-059-627-01	CAP		#22
84	3-067-170-01	TAPE (20X20), HARNESS STOPPER		#87
93	X-3951-722-1	COVER ASSY, LOWER		#87
106	X-3951-317-1	LID ASSY		#87
112	3-066-498-01	TAPE, VOID		#87
151	1-757-934-11	CABLE, FLEXIBLE FLAT (FFC-011)		#12
151	1-757-934-21	CABLE, FLEXIBLE FLAT (FFC-011)		#12
152	1-823-341-11	CABLE, FLEXIBLE FLAT (FFC-015)		#12
152	1-823-341-21	CABLE, FLEXIBLE FLAT (FFC-015)		#12
153	1-961-160-21	HARNESS (HS-059)		#12
158	3-068-675-02	SHIELD (HDD)		#87
162	3-069-212-01	TAPE, HARNESS STOPER		#16
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87
M354	3-059-622-02	SCREW (M3X54), HEAD TAPPPING		#87
M360	3-069-168-01	TITE (CZN), M3X6 +BV S		#87

MD Block



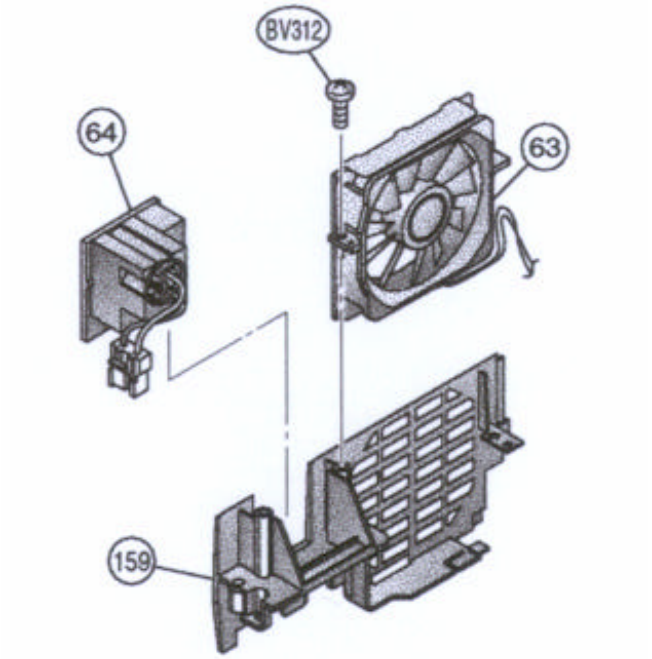
Ref-No.	Part No.	Description	Remark	Place code
17	3-060-400-01	TAPPING (B2X6.5)		#10
27	X-3951-609-1	BRACKET ASSY, PULLEY		#10
28	X-3951-608-1	TRAY ASSY		#10TR
31	1-680-370-12	PWB, FLEXIBLE		#10

GB-003/GB-004 and Plate Assy Block



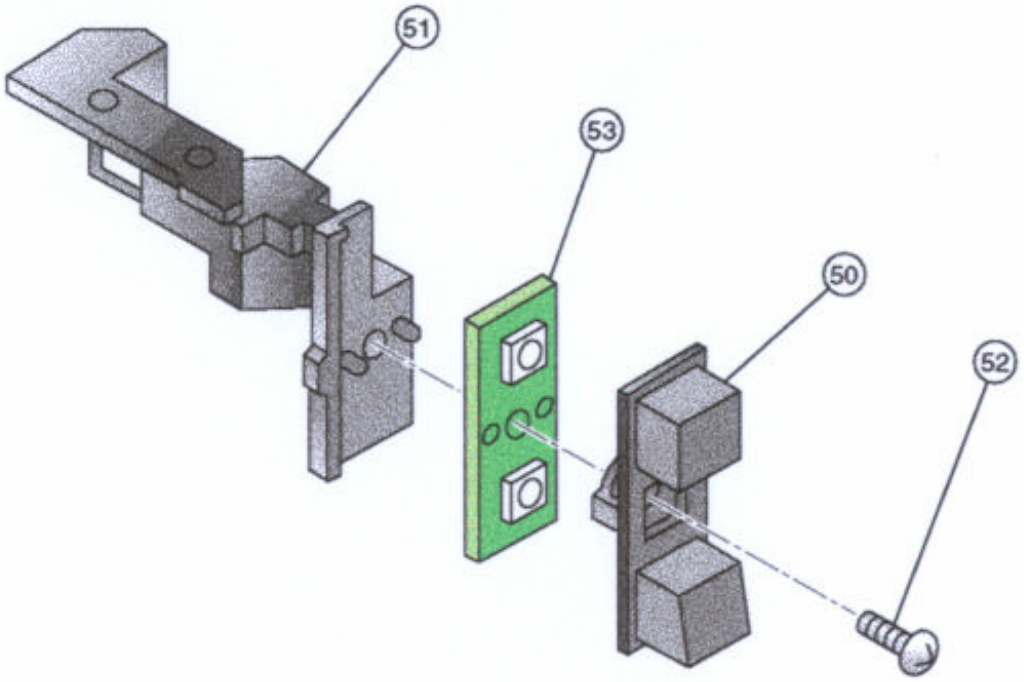
Ref-No.	Part No.	Description	Remark	Place code
61	1-528-174-41	BATTERY, LITHIUM (CR2032 TYPE)		#25GB
153	1-961-160-21	HARNESS (HS-059)		#12
GB003	A-6712-923-A	GB-003 MOUNT	*Use for combine with GH010.*	#25GB
GB004	A-6712-984-A	GB-004 MOUNT	*Use for combine with GH012.*	#25GB
GB005	A-6712-996-A	GB-005 MOUNT	*Use for combine with GH013.*	#25GB
GB006	A-6712-984-A	GB-006 MOUNT	*Use for combine with GH014.*	#25GB

Fan and Rear Panel Block



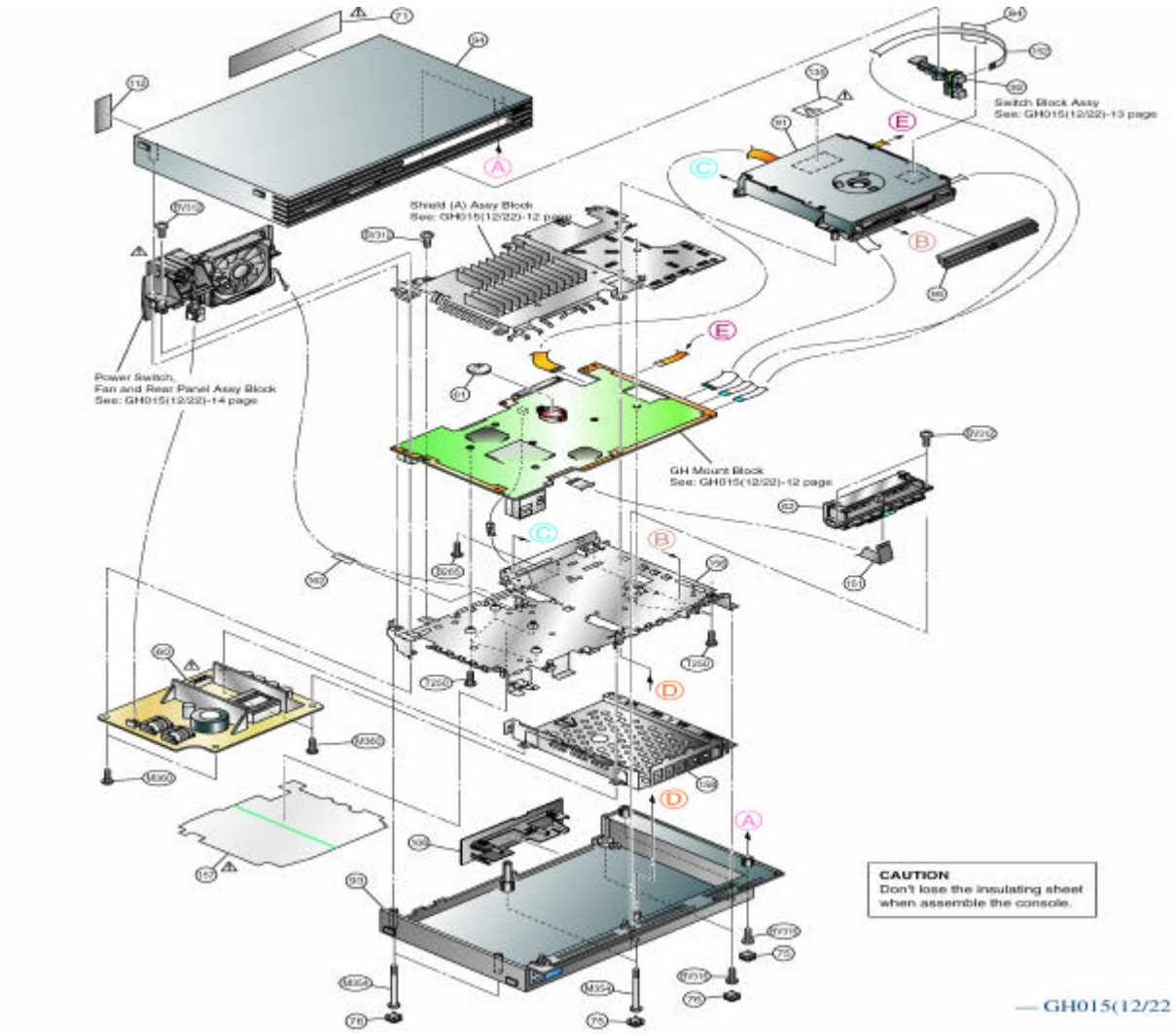
Ref-No.	Part No.	Description	Remark	Place code
63	1-763-480-23	DC. FAN		#74
63	1-763-544-22	FAN, DC		#74
63	1-763-756-11	FAN, DC		#74
64	1-771-995-31	SWITCH, POWER (WITH AC INLET)		#00
64	1-786-209-21	SWITCH, POWER (AC INLET)		#00
159	3-068-676-12	PANEL, REAR		#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87

(92) Switch Assy Block

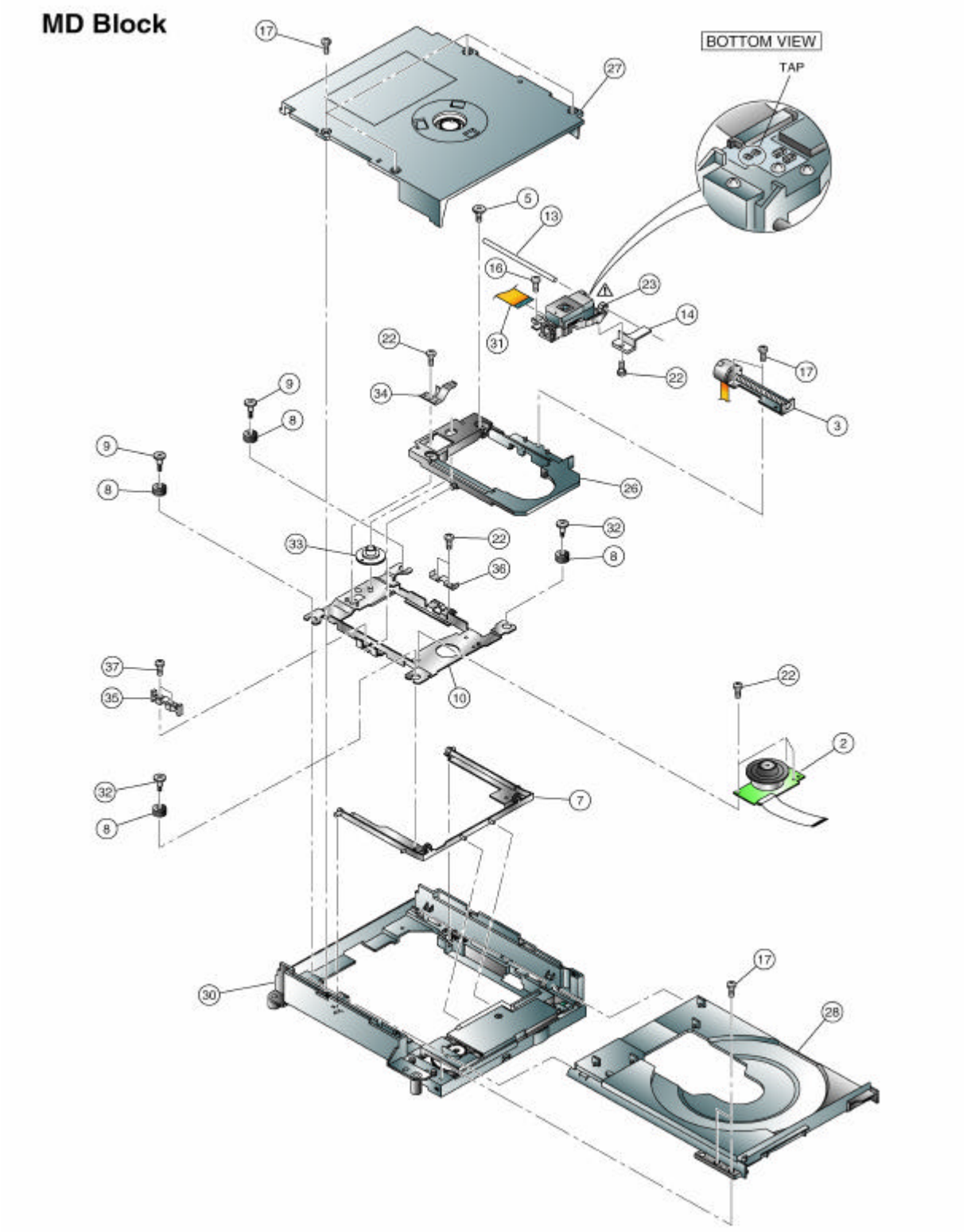


Ref-No.	Part No.	Description	Remark	Place code
92	A-6705-338-A	SWITECH BLOCK ASSY	*Used for combine with GH010.*	#25SW
92	A-6705-424-A	SWITECH BLOCK ASSY	*Used for combine with GH013.*	#25SW
92	A-6705-401-A	SWITECH BLOCK ASSY	*Used for combine with GH012/GH014.*	#25SW
50	3-059-665-03	BUTTON, SWITCH		#25SW
51	3-059-666-05	BRACKET, SWITCH		#25SW
51	3-066-494-01	BRACKET, SWITCH		#25SW
52	7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT		#25SW

Overall and Main Block for SCPH-30002 R(AU3) /-30003 R(CEK) /-30004 R(CEL) (F)

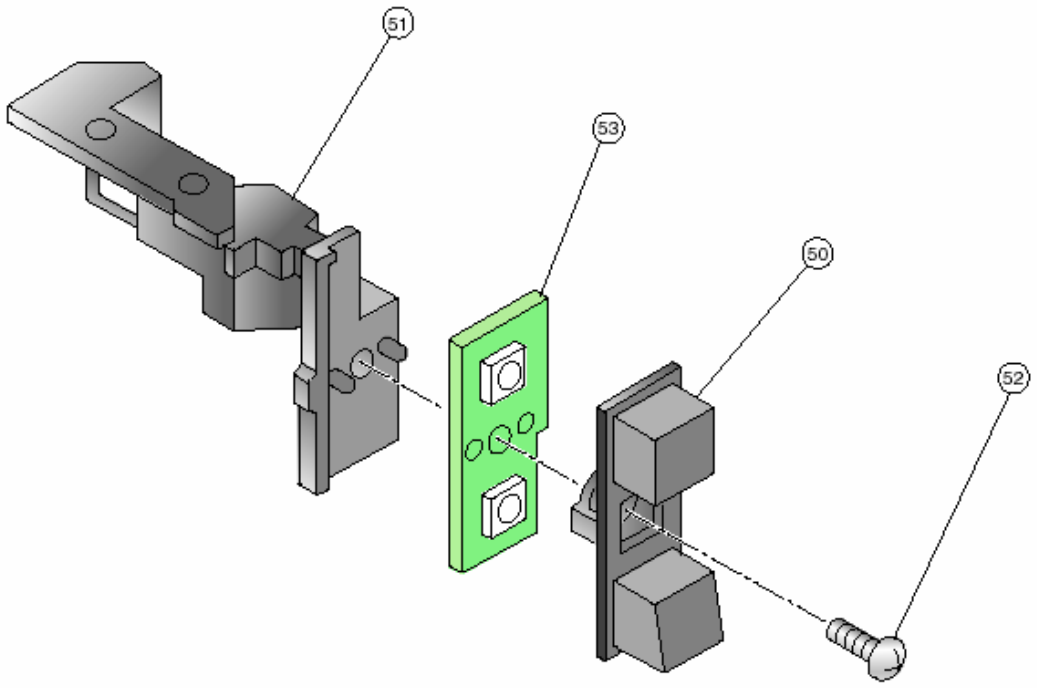


Ref-No.	Part No.	Description	Remark	Place
60	1-468-605-11	POWER BLOCK	for 220-240V AC	#00
60	1-468-605-21	POWER BLOCK	for 220-240V AC	#00
61	1-528-174-41	BATTERY, LITHIUM (CR2032 TYPE)		#25GH
62	1-694-873-11	TERMINAL BOARD (FRONT)		#17
62	1-694-874-11	TERMINAL BOARD (FRONT)		#17
62	1-694-875-11	TERMINAL BOARD (FRONT)		#17
75	3-059-626-03	COVER, SCREW		#22
76	3-059-627-01	CAP		#22
84	3-067-170-01	TAPE (20X20), HARNESS STOPPER		#87
93	X-3951-722-2	COVER ASSY, LOWER		#87
95	X-3951-099-1	PLATE ASSY, ORNAMENTAL		#87
106	3-070-847-11	LID		#87
112	3-066-498-01	TAPE, VOID		#87
151	1-757-934-11	CABLE, FLEXIBLE FLAT (FFC-011)		#12
151	1-757-934-21	CABLE, FLEXIBLE FLAT (FFC-011)		#12
151	1-757-934-31	CABLE, FLEXIBLE FLAT (FFC-011)		#12
152	1-823-341-11	CABLE, FLEXIBLE FLAT (FFC-015)		#12
152	1-823-341-21	CABLE, FLEXIBLE FLAT (FFC-015)		#12
157	3-071-971-01	SHEET, INSULATING		#16
158	3-071-973-01	SHIELD HDD (F)		#87
162	3-069-212-01	TAPE, HARNESS STOPPER		#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87
BV316	3-325-679-91	TAPPING +BV 3X16		#87
M354	3-059-622-02	SCREW (M3X54), HEAD TAPPING		#87
M360	3-069-168-01	TITE (CZN), M3X6 +BV S		#87



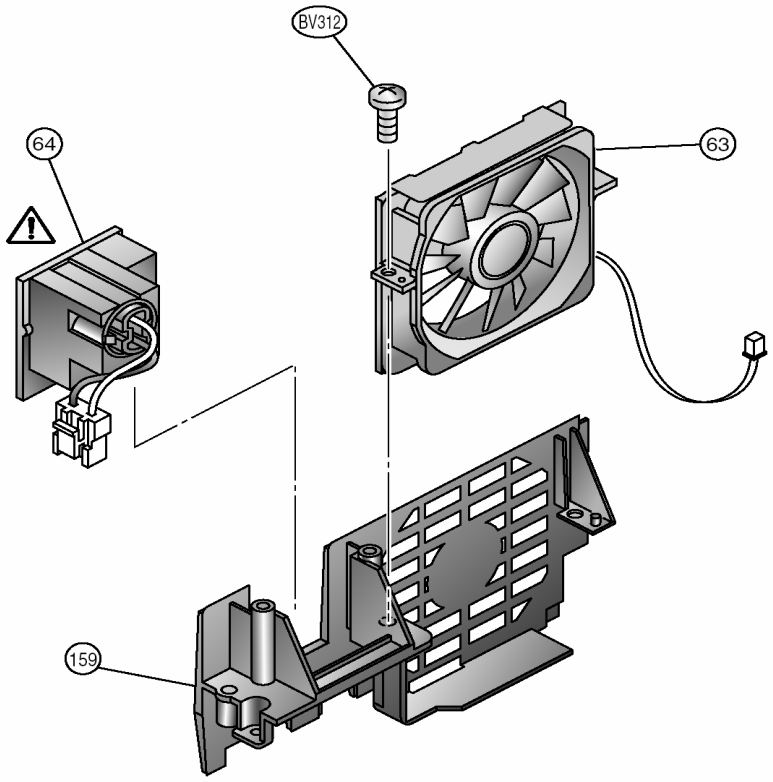
Ref-No.	Part No.	Description	Remark	Place
17	3-060-400-01	TAPPING (B2X6.5)		#10
27	X-3952-059-1	BRACKET ASSY, PULLEY		#10
28	X-3952-060-1	TRAY ASSY		#10TR
31	1-680-370-21	PWB, FLEXIBLE		#10

Switch Assy Block



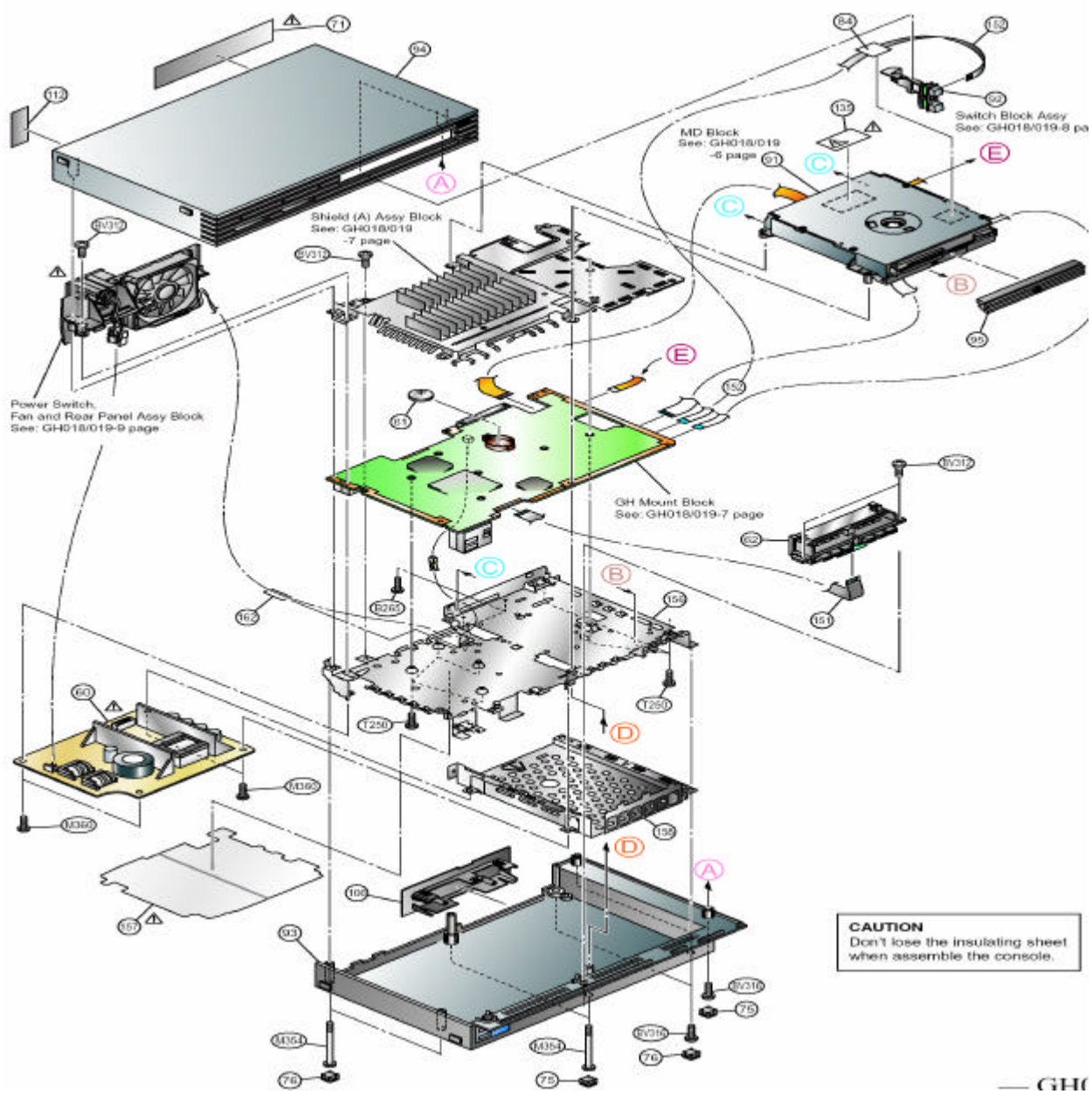
Ref-No.	Part No.	Description	Remark	Place
50	3-059-665-03	BUTTON, SWITCH		#25SW
51	3-059-666-05	BRACKET, SWITCH		#25SW
51	3-066-494-01	BRACKET, SWITCH		#25SW
52	7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT		#25SW
53	A-6715-500-A	sw-367 COMPL		#25SW
	A-6714-500-A	SW-367 MOUNT		
53	A-6787-465-A	sw-367 COMPL (VA)		#25SW
	A-6787-466-A	SW-367 MOUNT (VA)		

Power Switch, Fan and Rear Panel Assy Block

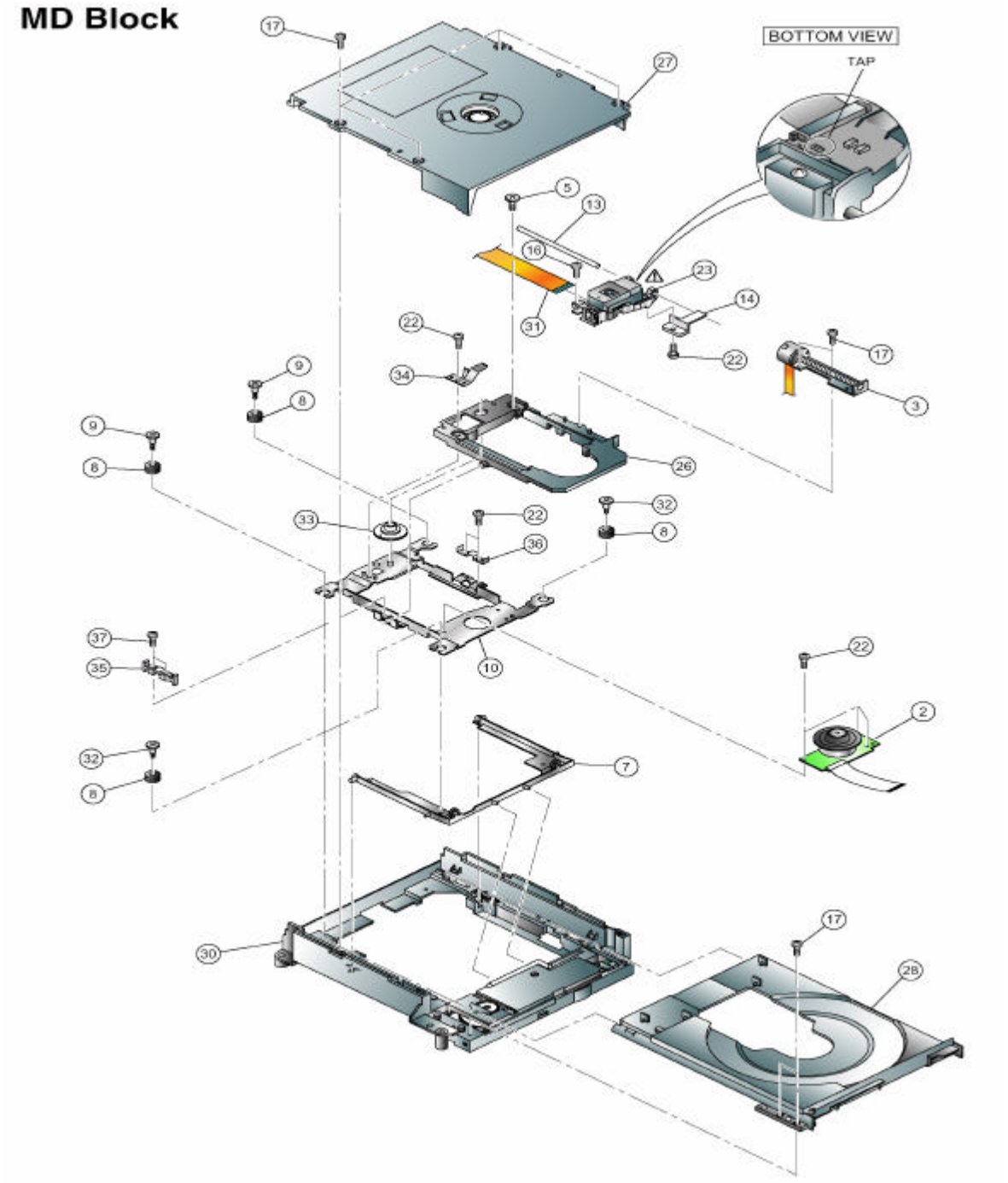


Ref-No.	Part No.	Description	Remark	Place
63	1-763-480-31	DC.FAN		#74
63	1-763-554-31	FAN DC.		#74
63	1-763-756-21	FAN DC.		#74
64	1-771-994-31	SWITCH, POWER (WITH AC INLET)	for SCPH-30001 R	#00
64	1-786-209-21	SWITCH, POWER (WITH AC INLET)	for SCPH-30002 R /-30003 R /-30004 R	
		SWITCH, POWER (WITH AC INLET)	for SCPH-30005 R /-30006 R /-30007 R	
159	3-071-901-01	PANEL, REAR	for SCPH-30001 R/-30005 R	#87
159	3-071-901-11	PANEL, REAR	for SCPH-30002 R/-30003 R/-30004 R SCPH-30006 R/-30007 R	#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87

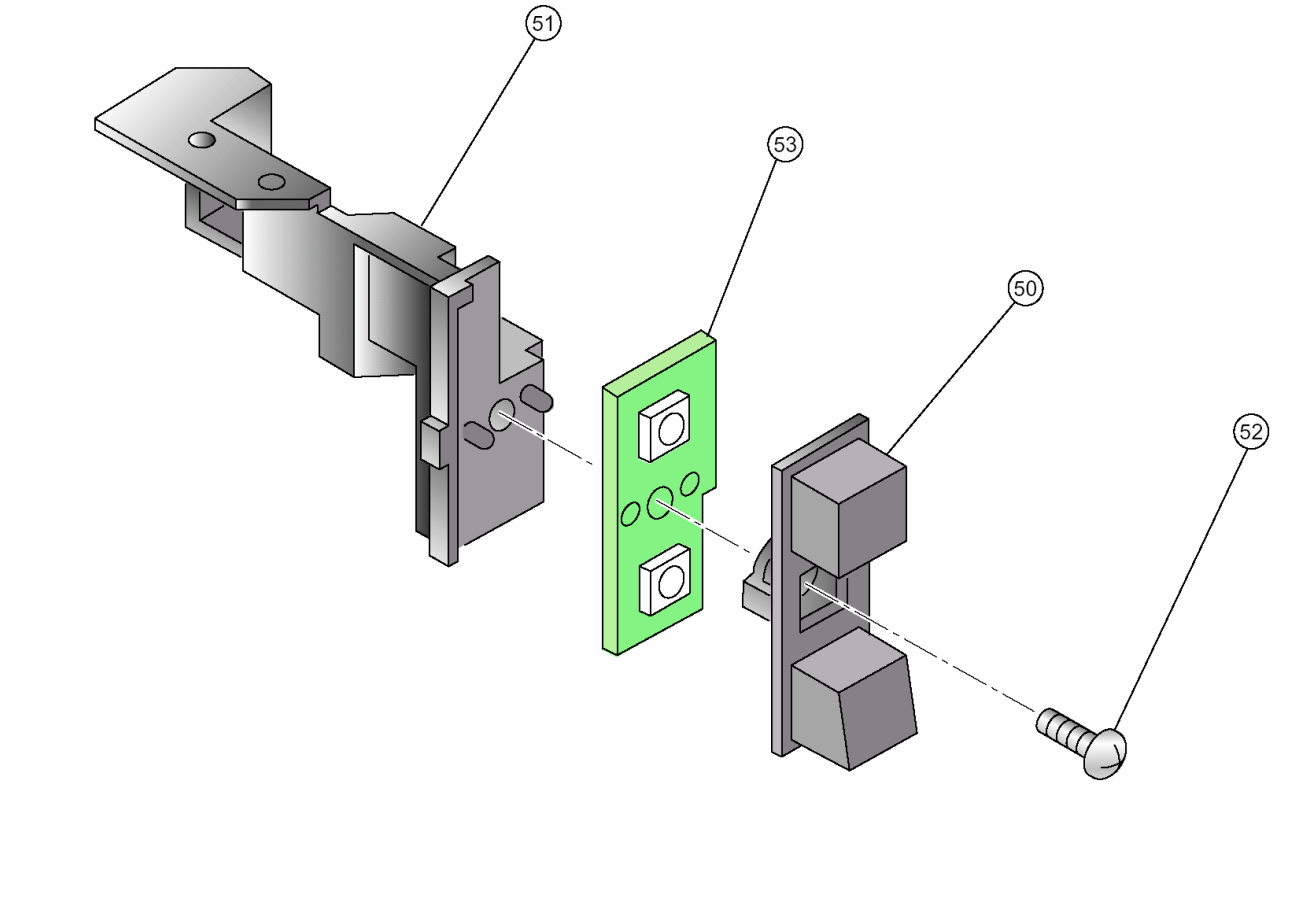
Overall and Main Block for SCPH-39002 / 39003 / 39004 / 39008 (G)



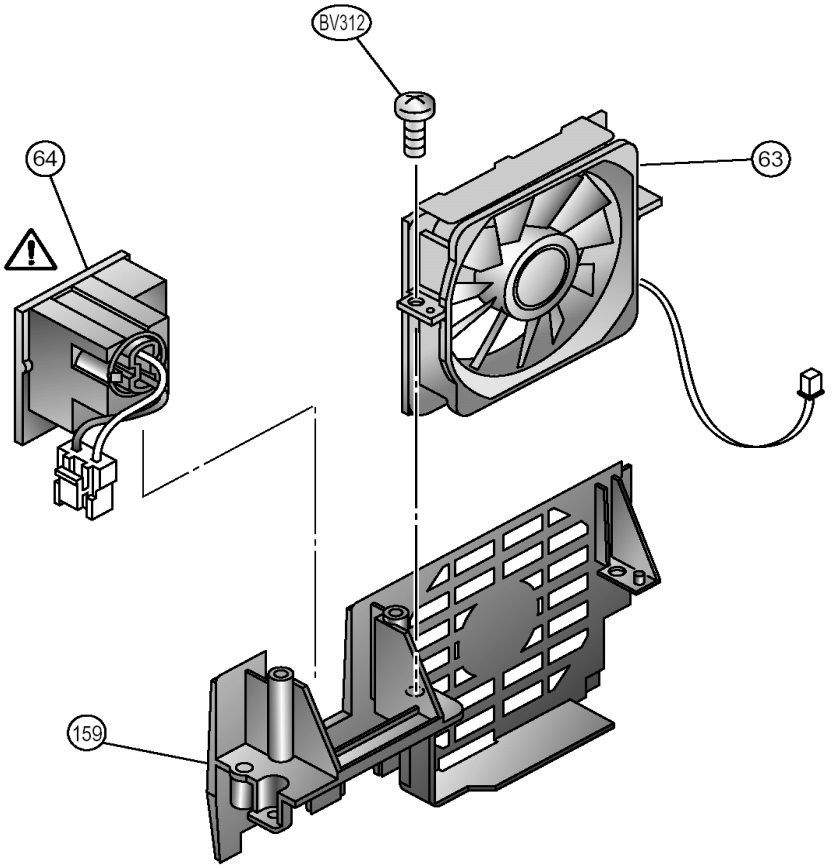
Ref-No.	Part No.	Description	Remark	Place code
60	1-468-605-31	POWER BLOCK for 220-240V AC		#00
61	1-528-174-41	BATTERY, LITHIUM (CR2032 TYPE)		#25GH
62	1-694-875-11	TERMINAL BOARD (FRONT)		#17
75	3-059-626-03	COVER, SCREW		#22
76	3-059-627-01	CAP		#22
84	3-067-170-01	TAPE (20X20), HARNESS STOPPER		#87
92	A-6787-644-A	SWITCH BLOCK ASSY		#87
93	X-3951-722-2	COVER ASSY, LOWER		#87
95	X-3951-099-1	PLATE ASSY, ORNAMENTAL		#87
106	3-070-847-01	LID		#87
112	3-066-498-01	TAPE, VOID		#87
112	3-079-117-01	TAPE, VOID (For SCPH-39008)		#87
151	1-757-934-11	CABLE, FLEXIBLE FLAT (FFC-011)		#12
152	1-823-341-11	CABLE, FLEXIBLE FLAT (FFC-015)		#12
157	3-071-971-01	SHEET, INSULATING		#16
158	3-071-973-01	SHIELD HDD (F)		#87
162	3-069-212-01	TAPE, HARNESS STOPPER		#87
B265	3-069-170-01	TAPPING (B2X6.5)		#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87
BV316	3-070-296-01	TAPPING +BV 3X16		#87
M354	3-059-622-02	SCREW (M3X54), HEAD TAPPING		#87
M360	3-069-168-01	TITE (CZN) M3X6 +BV S		#87
T250	3-071-976-01	TAPPING (2X5)		#87



Ref-No.	Part No.	Description	Remark	Place code
17	3-060-400-01	TAPPING (B2X6.5)		#10
27	X-3952-059-1	BRACKET ASSY, PULLEY		#10
28	X-3952-060-1	TRAY ASSY		#10TR
31	1-680-370-22	PWB, FLEXIBLE		#10

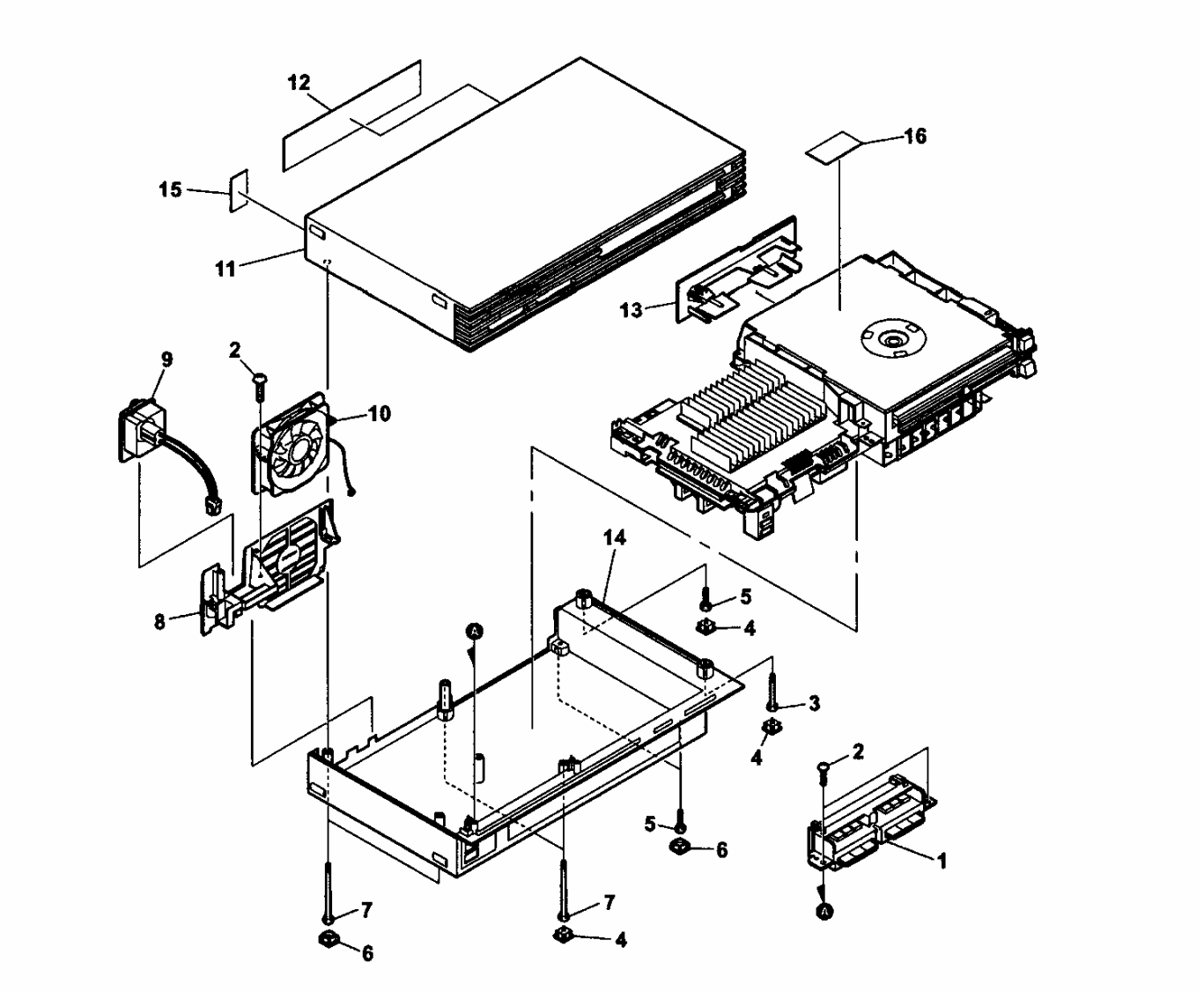


Ref-No.	Part No.	Description	Remark	Place code
50	3-059-665-03	BUTTON, SWITCH		#25SW
51	3-059-666-05	BRACKET, SWITCH		#25SW
51	3-066-494-01	BRACKET, SWITCH		#25SW
52	7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT		#25SW
53	A-6787-551-A	COMPLETE PWB (VA), SW-373	Use with GH018 MOUNT	#25SW
	A-6787-552-A	SW-373 MOUNT		
53	A-6787-553-A	COMPLETE PWB (VA), SW-373(VA)	Use with GH018 MOUNT	#25SW
	A-6787-554-A	SW-373 MOUNT (VA)		
53	A-6787-645-A	COMPLETE PWB (VA), SW-382	Use with GH019 MOUNT	#25SW
	A-6787-646-A	SW-382 MOUNT		
53	A-6787-647-A	COMPLETE PWB (VA), SW-382(VA)	Use with GH019 MOUNT	#25SW
	A-6787-648-A	SW-382 MOUNT (VA)		
53	A-6787-976-A	COMPLETE PWB, SW-393	Use with GH022 MOUNT	#25SW
	A-6787-977-A	SW-393 MOUNT		
53	A-6787-978-A	COMPLETE PWB (VA), SW-393	Use with GH022 MOUNT	#25SW
	A-6787-979-A	SW-393 MOUNT (VA)		

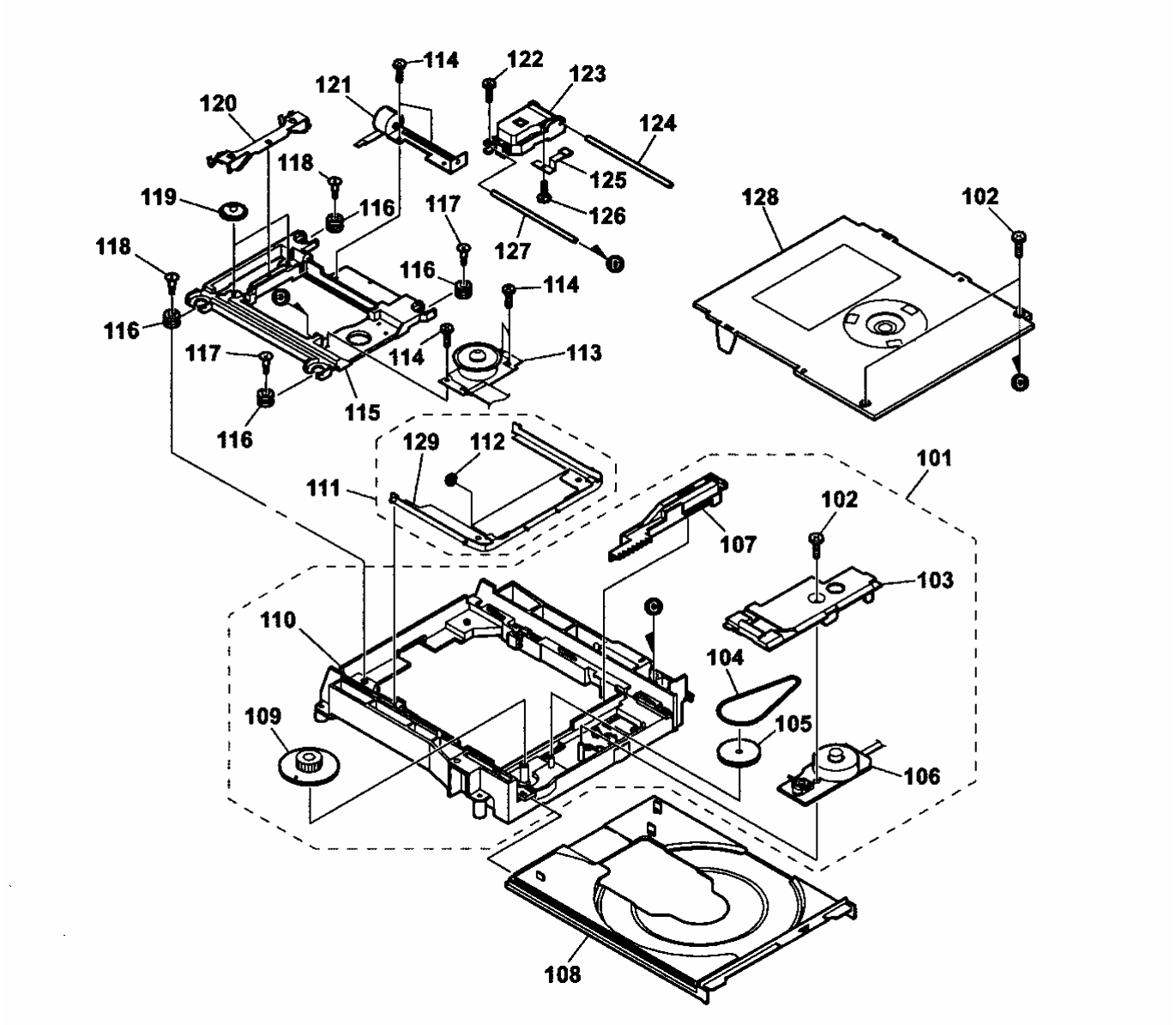


Ref-No.	Part No.	Description	Remark	Place code
63	1-763-480-31	DC. FAN		#74
64	1-786-209-21	SWITCH, POWER (WITH AC INLET)		#00
159	3-071-901-01	PANEL, REAR		#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87

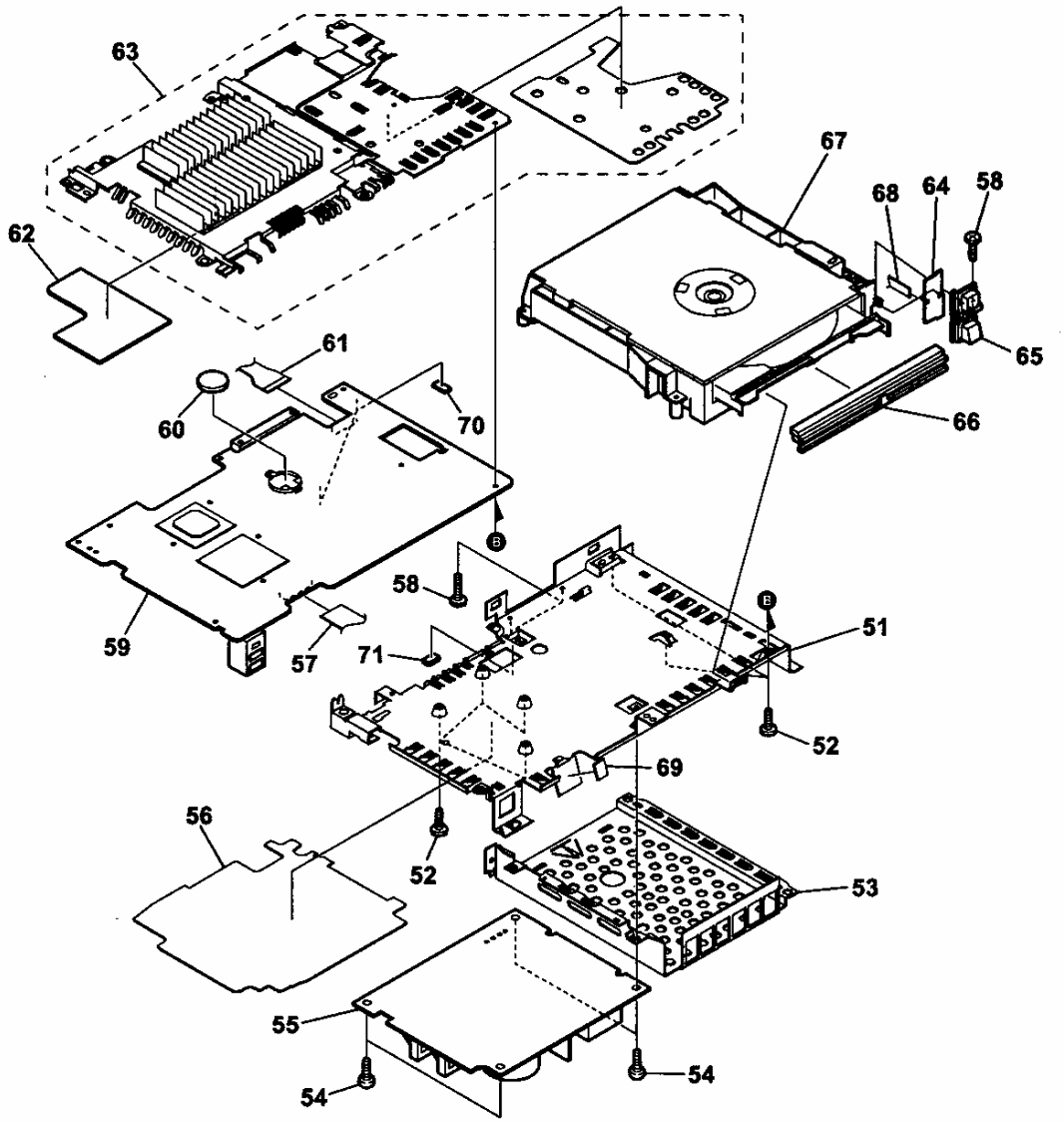
Overall and Main Block for SCPH-50002 / 50003 / 50004 / 50008 (H & H SS)



Ref-No.	Part No.	Description
1	169487513	TERMINAL BOARD (FRONT)
2	307455511	SCREW, +BV TAPPING
3	308452101	SCREW (M3X27), TAPPING
4	307454801	COVER, SCREW
5	307455501	SCREW, +BV TAPPING
6	307454901	CAP
7	307455601	SCREW, BRAZIER HEAD P TIGHT
8	308450601	PANEL (H), REAR
13	307455001	LID
15	306625301	TAPE, VOID



Ref-No.	Part No.	Description
108	308452201	TRAY (H)
128	X39535891	BRACKET (H) ASSY, PULLEY



Ref-No.	Part No.	Description
54	307455301	TITE (CZN), M3X6 +BV S
55	146875821	POWER BLOCK (SWITCHING REGULATOR)
56	308451901	SHEET (H),INSULATING
57	175793411	CABLE, FLAT (FFC-011)
58	308452001	SCREW (B2X6.5B), TAPPING
61	168037023	FLEXIBLE BOARD
62	308029301	SHEET (A), ELECTRIC HEAT
63	X39535881	SHIELD (A) (H) ASSY
65	308450901	BUTTON (H), SWITCH
66	X39535871	PLATE (H) ASSY, ORNAMENTAL
66	X39537411	PLATE (H) ASSY, ORNAMENTAL SILVER (H SS)
68	182715011	CABLE, FLEXIBLE FLAT (FFC-019)
69	308580001	SHEET(H), FERRITE
70	308029401	SHEET (DRIVER), ELECTRIC HEAT

PS2 Peripherals

Ref-No.	Part No.	Description
AC EURO	157513182	CORD, POWER
CONV	157329111	CONNECTOR, CONVERSION
AV	179202831	AV CABLE
CONT	182355212	ANALOG CONTROLLER(DUAL SHOCK 2)
CONT	182770211	ANALOG CONTROLLER(DUAL SHOCK 2) **SILVER**

10. QUALITY ASSURANCE TEST (QA TEST)

Ref-No.	Part No.	Description	Remark Place	code
n/a	J-250-407-3A	SVD 4514		n/a
n/a	J-250-407-0A	SCD 4515		n/a
n/a	J-2504-118-A	SVD-E94075	for SCPH 39002/3/4	n/a

QA-Test-disc is supplied as a spare part. If the units pass test with PS-game, PS2-game and DVD, EVERY unit needs a QA-test and has to pass the QA-test. After the QA-test, an aging-test with a PlayStationR2-demo disc needs to be done during two hours. If the unit passes this test, the unit can be considered as repaired and can be returned to the customer. The following QA-Test guidelines should be followed:

To perform the QA-test, the following equipment is required:

- Test-CD: SCD 4515 and SVD 4514 and SVD-E94075 (available as spare part)
- 2 grey (PS) + 2 black (PS2) memory cards (not supplied)[1]
- TV (not supplied) [2]
- Amplifier with OP dig out connection + loudspeaker (not supplied) [2]
- USB-cable (not supplied) [2]
- Optical Digital Cord (not supplied)[2]
- 2 Dual Shocks PS2 (not supplied)[1]

Note:
[1] Please use existing stock
[2] These equipments are generic equipment and should already be available at SSC and ACS.

Process-description:

1. Connect Power Cord, AV-cable & optical digital cord to the unit (Backside);
2. Connect USB-cable and insert the 2 grey memory cards and Dual Shocks (Front side);
3. Switch the Power ON & push the reset button;
4. Insert SCD 4515 test disc;
5. Check Audio and Video: CARD 0 and CARD 1 must be: OK;
6. Push R1 button on Dual Shock and check Audio and Video;
7. Push L1 button on Dual Shock and check Audio and Video;
8. Remove SCD 4515, insert SVD 4515 and push the reset-button;
9. Replace grey memory cards with the black ones;
10. Check Screen " PS2 check disc V2.00" All items must be OK;
11. Push L1, R1 and red O-button together and " Check V-RAM" OK, push red O-button again and V-RAM: OK;
12. Push red O-button and check Audio (TV + Loudspeaker) and Video;
13. Push red O-button and check Audio and Video;
14. Push red O-button "RD-RAM-test 0.02" OK;
15. Push red O-button "HDD-connector-test" OK;
16. Remove disc and switch off the unit.

Date	Written by	Approved by
09-Nov-2001		
	Warllen Duque Compliance Manager Sony Computer Entertainment Europe	Mike Nabarro Vice-President of Technical Services Sony Computer Entertainment Europe

*** end of page ***

PlayStation®2

SCPH-30000 series
SCPH-35000 series
SCPH-30000R series
SCPH-39000 series
SCPH-50000/50000SS/50000AQ series

SERVICE MANUAL – Appendix A component list Level-2

version 3

Appendix A - Level 2 component list

Most of the components listed within refer back to the reference diagrams printed in the Level 1 manual. Only authorised SSC / ASC will be able to order these parts through WRPC(E). All processes and technical information required to perform level 2 service is covered by specific training at SEC for authorised engineers.

Level 2 main processes include:

- Optical Block replacement and adjustment.
- Main Board exchange procedure and ID re-write

SCPH 30002/3/4 C Overall and Main Block re. Page 7

Ref-No.	Part No.	Description	Remark	Place code
71 Euro	3-066-490-02	LABEL, MODEL NUMBER for SCPH-30004		#87
84	3-067-170-01	TAPE, HARNESS STOPPER		#88
89	3-325-679-91	SCREW (2 LOCK), +BV TAPPING		#87
96	X-3951-395-1	CHASSIS ASSY		#87
110	3-066-501-01	FRAME (LOWER)		#16
135	3-988-711-02	LABEL, LASER CAUTION		#10
140	3-066-545-01	SHEET (R), ELECTRIC HEAT		#16
141	X-3951-396-1	SHIELD (C) ASSY		#87
146	3-066-609-01	CLIP, SHIELD		#00
147	3-066-488-01	SCREW (M3X9), +BV TAPPING		#25GD
150	A-6705-236-A	FRAME (UPPER) BLOCK ASSY		#87

SCPH 30002/3/4 C MD Block re. Page 8

Ref-No.	Part No.	Description	Remark	Place code
2	1-763-611-11	MOTOR, DC (SPINDLE)		#10SP
3	1-763-639-11	MOTOR, DC		#10
5	3-059-845-01	SCREW (B2X6.5), SHAFT RETAINER		#10
7	3-065-275-02	FRAME, SUB		#10
8	3-065-277-01	INSULATOR		#10
9	3-065-276-01	SCREW, STEP		#10
10	X-3951-151-1	CHASSIS ASSY, MAIN		#10
13	3-059-854-01	SHAFT, MAIN		#10
14	3-059-855-02	RACK		#10
16	3-060-399-01	SCREW, SKEW		#10
18	3-065-281-01	SHEET, SHAFT RETAINER		#10
22	3-062-728-01	0 PLATE 3 MAIN M2X3.2		#10
23	8-820-141-34	DEVICE, OPICAL KHS-400B		#10OP
26	X-3951-152-2	CHASSIS ASSY, SUB		#10
30	3-065-271-03	FRAME, MAIN		#10
32	3-065-279-02	SCREW, CAM RETAINER		#10
33	3-065-278-02	CAM, TILT		#10
34	3-067-169-01	SPRING (TILT), PLATE		#10
35	3-065-282-01	GUIDE (L)		#10
36	3-065-283-01	GUIDE (R)		#10
37	3-065-557-01	SCREW (M2X6.0)		#10
38	3-065-274-01	CAM, SLIDE		#10GB
39	3-065-505-0	BELT, RUBBER		#10GB
40	3-067-186-01	SHEET (V), ELECTRIC HEAT		#10
42	X-3951-501-1	HEAT SINK ASSY, MD		#10
138	1-757-588-11	CABLE, FLAT (FFC-308)		#12

SCPH 30000 & 35000 series D Overall and Main Block re. Page 10

Ref-No.	Part No.	Description	Remark	Place code
71 Euro	3-069-121-01	LABEL, MODEL NUMBER (CEL) for SCPH-30003D		#87
94	X-395-172-12	COVER ASSY, UPPER		#87
135	3-988-711-02	LABEL, LASER CAUTION		#87
156	3-068-669-02	SHIELD (B)		#16
156	3-068-669-11	SHIELD (B)		#16
157	3-068-674-02	SHEET, INSULATING		#16
161	3-070-120-01	SHEET, INTERCEPTION for GH010 and GH014.		#16
B265	3-069-170-01	TAPPING (B2X6.5)		#87
BV316	3-070-296-01	TAPPING +BV 3X16		#87
BV316	3-325-679-91	SCREW (2 LOCK), +BV TAPPING		#87
M225	3-069-169-01	SCREW (M2X2.5)		#87

SCPH 30000 & 35000 series D MD Block re. Page 11

Ref-No.	Part No.	Description	Remark	Place code
2	1-763-700-12	MOTOR, DC (SPINDLE)		#10SP
2	8-835-733-02	MOTOR, DC SSC28C/C-NP (SPINDLE)		#10SP
3	1-763-639-21	MOTOR, DC		#10
5	3-059-845-01	SCREW (B2X6.5), SHAFT RETAINER		#10
7	X-3951-637-1	FRAME ASSY, SUB		#10
8	3-065-277-01	INSULATOR		#10
9	3-065-276-01	SCREW, STEP		#10
10	X-3951-606-1	CHASSIS ASSY, MAIN		#10
13	3-059-854-02	SHAFT, MAIN		#10
14	3-059-855-02	RACK		#10
16	3-060-399-01	SCREW, SKEW		#10
17	3-060-400-01	TAPPING (B2X6.5)		#10
22	3-062-728-01	0 PLATE 3, MAIN M2X3.2		#10
23	8-820-141-33	DEVICE, OPICAL KHS-400B		#10OP
26	X-3951-607-1	CHASSIS ASSY, SUB		#10
27	X-3951-609-1	BRACKET ASSY, PULLEY		#10
28	X-3951-608-1	TRAY ASSY		#10TR
30	X-3951-610-3	FRAME ASSY, MAIN		#10
32	3-068-075-01	SCREW (SUB), STEP		#10
33	3-065-278-02	CAM, TILT		#10
34	3-068-076-01	SPRING (TILT), LEAF		#10
35	3-065-282-01	GUIDE (L)		#10
36	3-065-283-01	GUIDE (R)		#10
37	3-065-557-01	SCREW (M2X6.0)		#10
41	3-065-279-02	SCREW, CAM RETAINER		#10

SCPH 30002/3/4 R F Overall & Main Block

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Ref-No.	Part No.	Description	Remark	Place code
71 Euro	3-072-417-01	LABEL, MODEL NUMBER (CEL)	for SCPH-30004 R F	#87
92	A-6705-439-A	SWITCH BLOCK ASSY		#87
94	X-395-172-12	COVER ASSY, UPPER		#87
156	3-071-970-01	SHIELD B (F)		#16
B265	3-069-170-01	TAPPING (B2X6.5)		#87

SCPH 30002/3/4 R F MD Block

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Ref-No.	Part No.	Description	Remark	Place code
2	1-763-700-21	MOTOR, DC (SPINDLE)		#10SP
3	1-763-639-21	MOTOR, DC(SLED)		#10
5	3-059-845-01	SCREW (B2X6.5), SHAFT RETAINER		#10
7	X-3951-637-1	FRAME ASSY, SUB		#10
8	3-065-277-01	INSULATOR		#10
9	3-065-276-01	SCREW, STEP		#10
10	3-071-957-01	CHASSIS, MAIN		#10
13	3-059-854-02	SHAFT, MAIN		#10
14	3-059-855-02	RACK		#10
16	3-060-399-01	SCREW, SKEW		#10
17	3-060-400-01	TAPPING (B2X6.5)		#10
22	3-062-728-01	0 PLATE 3 MAIN M2X3.2		#10
23	8-820-151-18	DEVICE, OPTICAL KHS-400C Made by Sony		#10OP
26	X-3952-057-1	CHASSIS ASSY, SUB		#10
27	X-3952-059-1	BRACKET ASSY, PULLEY		#10
28	X-3952-060-1	TRAY ASSY		#10TR
30	X-3952-058-1	FRAME ASSY, MAIN		#10
32	3-068-075-02	SCREW (SUB), STEP		#10
33	3-071-965-01	CAM, TILT		#10
34	3-071-966-01	SPRING (TILT), LEAF		#10
35	3-065-282-01	GUIDE (L)		#10
36	3-065-283-01	GUIDE (R)		#10
37	3-065-557-01	SCREW (M2X6.0)		#10

SCPH 39002/3/4/8 G Overall and Main Block

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Ref-No.	Part No.	Description	Remark	Place code
71 Euro	3-077-347-01	LABEL, MODEL NUMBER (CEL) for	SCPH-39004	#87
71 Ru	3-079-073-51	LABEL, MODEL NUMBER (RU3) for	SCPH-39008	#87
94	X-395-170-52	COVER ASSY, UPPER		#87
156	3-077-018-01	SHIELD (B) (G)		#16
161	3-070-120-01	SHEET, INTERCEPTION		#87

SCPH 39002/3/4/8 G MD Block

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Ref-No.	Part No.	Description	Remark	Place code
2	1-763-700-21	MOTOR, DC (SPINDLE)		#10SP
3	1-763-639-21	MOTOR, DC		#10
3	1-763-791-11	MOTOR, DC (SLED)		#10
5	3-059-845-01	SCREW (B2X6.5), SHAFT RETAINER		#10
7	X-3951-637-1	FRAME ASSY, SUB		#10
8	3-065-277-01	INSULATOR		#10
9	3-065-276-01	SCREW, STEP		#10
10	3-071-957-01	CHASSIS, MAIN		#10
13	3-059-854-02	SHAFT, MAIN		#10
14	3-059-855-02	RACK		#10
16	3-060-399-01	SCREW, SKEW		#10
17	3-060-400-01	TAPPING (B2X6.5)		#10
22	3-062-728-01	0 PLATE 3 MAIN M2X3.2		#10
23	8-820-151-18	DEVICE, OPTICAL KHS-400C/J1NP2		#10OP
26	X-3952-057-2	CHASSIS ASSY, SUB		#10
27	X-3952-059-1	BRACKET ASSY, PULLEY		#10
28	X-3952-060-1	TRAY ASSY		#10TR
30	X-3952-058-3	FRAME ASSY, MAIN		#10
32	3-068-075-02	SCREW (SUB), STEP		#10
33	3-071-965-03	CAM, TILT		#10
34	3-071-966-02	SPRING (TILT), LEAF		#10
35	3-065-282-01	GUIDE (L)		#10
36	3-065-283-01	GUIDE (R)		#10
37	3-065-557-01	SCREW (M2X6.0)		#10

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Ref-No.	Part No.	Description	Remark
11	X39535851	COVER ASSY(H), UPPER	(50002/3/4)
11	**X39537391**	**COVER ASSY(H), UPPER SILVER**	**(50002/3/4SS)**
11	**X39542631**	**COVER ASSY(H), UPPER AQUA**	**(50002/3/4AQ)**
16	307580401	LABEL, LASER CAUTION	
12 Euro	308463501	LABEL, MODEL NUMBER	(50004)
12 Euro	**308587901**	**LABEL, MODEL NUMBER SILVER**	**(50004SS)**
12 Euro	**309015501**	**LABEL, MODEL NUMBER AQUA**	**(50004SS)**

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Ref-No.	Part No.	Description
101	X39535901	FRAME (H) ASSY, MAIN
103	308452801	COVER (H), GEAR
104	306550502	BELT, RUBBER
105	305985601	PULLEY
106	176378221	MOTOR, DC (LO UNIT)
107	308452701	CAM (H), SLIDE
109	308452601	GEAR (H), DRIVING
110	308452501	FRAME (H), MAIN
111	X39535911	FRAME ASSY, SUB
112	306807401	CUSHION (FRAME)
113	176370022	MOTOR, DC (SPINDLE)
114	308182901	SCREW (P2X3.7)
115	308452901	CHASSIS
116	308183001	INSULATOR
117	306807502	SCREW (SUB), STEP
118	306527601	SCREW, STEP
119	308453201	CAM (TM), TILT
120	308453301	SPRING (TILT), LEAF
121	176388912	MOTOR, DC (SLED)
122	306039901	SCREW, SKEW
123	882015118	DEVICE, OPTICAL KHS-400C/J1NP2
124	308453001	SHAFT (H), MAIN
125	308182501	RACK
126	308265301	0 PART-NO. 3 MAIN M2X3
127	308453101	SHAFT (H), SUB
129	307425511	FRAME, SUB

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Ref-No.	Part No.	Description
51	308451401	SHIELD (B) (H)
52	307455201	0 PLATE 2 MAIN 2X5 S TITE
53	308451301	SHIELD (HDD) (H)
60	152817451	BATTERY, LITHIUM (CR2032 TYPE)
64	A6800233A	SW-398 BOARD, COMPLETE

SCPH 50002/3/4/8 I & ISS Overall and Main Block re. Page 25

Ref-No.	Part No.	Description
50	308450901	BUTTON (H), SWITCH
94	X39533011	COVER (H) ASSY, UPPER
94	**X39537391**	**COVER (H) ASSY, UPPER SILVER**
156	308845501	SHIELD (B (H))
71 Euro	308825301	LABEL SCPH-50004 (PS-S/I) FOX
71 Euro	**308869701**	**LABEL SCPH-50004SS (PS-S/I) FOX**
m327	308193901	SCREW (M3X27)

SCPH 50002/3/4/8 I & ISS MD Block re. Page 26

Ref-No.	Part No.	Description
2	176370023	MOTOR, DC (SPINDLE)
2	176388321	MOTOR, DC (SPINDLE)
2	176383313	MOTOR, DC (SPINDLE)
2	883578111	MOTOR, DC (SPINDLE)
2	176370031	MOTOR, DC (SPINDLE)
3	176388912	MOTOR, DC (SLED)
3	176379112	MOTOR, DC (SLED)
3	176363932	MOTOR, DC
3	176363922	MOTOR, DC
7	X39535911	FRAME ASSY, SUB
8	308183001	INSULATOR
9	306527601	SCREW, STEP
10	308452901	CHASSIS
13	308453001	SHAFT (H), MAIN
14	308182501	RACK
16	306039901	SCREW, SKEW
17	306040001	TAPPING (B2X6.5)
22	308182901	SCREW (P2X3.7)
23	882015128	DEVICE, OPTICAL KHS-400C
23	882015119	DEVICE, OPTICAL KHS-400C
23	882015120	DEVICE, OPTICAL KHS-400C
23	882015127	DEVICE, OPTICAL KHS-400C
23	882015121	DEVICE, OPTICAL KHS-400C
23	882015129	DEVICE, OPTICAL KHS-400C
27	X39532841	BRACKET ASSY, PULLEY
30	X39535901	FRAME (H) ASSY, MAIN
30	X39532831	FRAME (H) ASSY, MAIN
33	308453201	CAM (TM), TILT
34	308453301	SPRING (TILT), LEAF
35	308453101	SHAFT (H), SUB